PATENT
Application 10/737,289
Attorney Docket 2002-0377 (1014-046)

AMENDMENTS

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:

    for a call between a local Internet Protocol (IP) network and a remote non-IP network, converting IP packets to Pulse-Code Modulation (PCM) robbed bit signaling via a Voice over Internet Protocol (VoIP) channelized router, the VoIP channelized router adapted to terminate an IP packet call to a Digital Signal 0 (DS0) assignment, the VoIP channelized router adapted to route the IP packet call to a Hybrid IP Digital Loop Carrier system, the IP packet call converted to a multiple DS0 digital signal,

    providing the PCM robbed bit signaling to a Time-Division Multiplexing (TDM) switch.

2. (Previously Presented) The method of claim 1, further comprising:

    converting between IP packets and GR303 call reference values via the VoIP channelized router, the VoIP channelized router adapted to map a DS0 control signal to a GR303 Call reference value that is provisioned from the TDM switch.

3. (Original) The method of claim 1, further comprising:

    detecting an off-hook condition of a telephone on the local IP network.

4. (Original) The method of claim 1, further comprising:

    receiving, at the VoIP channelized router, an invite message related to an off hook condition of an IP telephone.

5. (Original) The method of claim 1, further comprising:

    providing a dial tone to a user of the local IP network.

6. (Original) The method of claim 1, further comprising:

    converting an invite message, responsive to an off-hook condition, to a B bit toggle conforming to PCM signaling at the VoIP channelized router; and

forwarding the B bit toggle to the TDM switch.

7. (Original) The method of claim 1, further comprising:

> receiving a called party telephone number from the local IP network.

8. (Previously Presented) The method of claim 1, further comprising:

> converting a called party telephone number to PCM signaling, the VoIP channelized router adapted to receive a PCM voice signal at a DS1 card where a DS0 time slot transports the signal to a GR303 hub.

9. (Original) The method of claim 1, further comprising:

> providing a called party telephone number to the TDM switch.

10. (Original) The method of claim 1, further comprising:

> sending a signal indicative of ringing to the local IP network.

11. (Original) The method of claim 1, further comprising:

> receiving a signal indicative of ringing from the TDM switch at the VoIP channelized router.

12. (Original) The method of claim 1, further comprising:

> converting a signal indicative of ringing to an invite F8 180 signal at the VoIP channelized router; and
>
> providing the F8 180 signal to the local IP network.

13. (Original) The method of claim 1, further comprising:

> receiving an A/B bit toggle from the TDM switch at the VoIP channelized router, the toggle responsive to a signal that a called party has answered the call.

14. (Original) The method of claim 1, further comprising:

converting an A/B bit toggle to an invite 200 message;

providing the invite 200 message to the local IP network.

15. (Previously Presented) The method of claim 1, further comprising:

receiving voice packets from the local IP network at the VoIP channelized router, the VoIP channelized router adapted to convert the voice packets to an M24 format, the VoIP channelized router adapted to convert the voice packets to a 15 kHz audio bandwidth in a 64 kb/s serial data stream.

16. (Previously Presented) The method of claim 1, further comprising:

receiving a TDM data sequence from the remote non-IP network at the VoIP channelized router, the VoIP channelized router adapted to encode analog audio signals into 384 kb/s bit streams and utilize six time slots on a DS1 digital transport service.

17. (Original) The method of claim 1, further comprising:

converting voice packets to an 8 bit TDM data sequence via IP packet-to-bit conversion; and

providing the TDM data sequence to the remote non-IP network.

18. (Currently Amended) The method of claim 1, further comprising:

converting an 8 bit TDM data sequence to voice packets, the VoIP channelized router adapted to encode frequency modulation radio station signals into a high fidelity audio that is transported over an ACCUNET 1.5 service; and

providing the voice packets to the local IP network.

19. (Currently Amended) A system comprising:

a local Voice over Internet Protocol (VoIP) channelized router, the VoIP channelized router adapted to terminate an Internet Protocol (IP) packet call to a Digital Signal 0 (DS0) assignment, the VoIP channelized router adapted to route the IP packet

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call to a Hybrid IP Digital Loop Carrier system, the IP packet call converted to a multiple DS0 digital signal l; and

means for communicatively coupling an IP network to a remote non-IP network using said channelized router.

20.   (Currently Amended) A machine readable medium storing instructions for activities comprising:

routing a call from an Internet protocol (IP) network to a remote non-IP network via local Voice over Internet Protocol (VoIP) channelized router, the VoIP channelized router adapted to terminate an IP packet call to a Digital Signal 0 (DS0) assignment, the VoIP channelized router adapted to route the IP packet call to a Hybrid IP Digital Loop Carrier system, the IP packet call converted to a multiple DS0 digital signal.